The Pronunciation of English Fricatives by Nigerian Undergraduates: A Study of Situation in Akwa Ibom State University

Dr. Usoro Mark Okono

Department of English
Akwa Ibom State University
Nigeria

ABSTRACT

This research set out to examine the pronunciation of English fricatives by Nigerian undergraduates. The theoretical bases were systemic functional grammar and descriptive linguistics. Ten undergraduate students from eight Departments of Akwa Ibom State university were randomly selected to read a passage and eleven sentences containing the nine fricative consonants of English. Their performances were recorded with android phone and played back several times for study analysis. It was discovered that voiceless fricatives posed no problem of articulation to the informants irrespective of position of occurrence. On the contrary, the voiced fricatives could not be articulated appropriately especially at word-final positions. The voiced palato-alveolar fricative is the strangest sound and could not be realized by any informant in all positions. It is concluded that mispronunciation of English phonemes can impede understanding and by extension, communication. I suggest that lecturers of English in L_2 situations should emphasize regular practice on English fricatives by students.

Keywords: Pronunciation, English Fricatives, Nigerian Undergraduates and Akwa Ibom State University

Introduction

English Language is used in Nigeria for various purposes. The major status of English is National Language. That is to say that English is used as an official language for administration, law, press media, business transaction, diplomacy, international trade and private business transaction. Above all (Okono, 2019, P. 59) English Language is used as a medium of instruction from the primary school up to the University Level. (Eka, 2000 P. 15) the two main mediums of the language are spoken and written. The third medium: the braille is meant for restricted use. The focus of the present research is on the spoken form of English. Since the principal sounds of English are of two types: vowels and consonants the focus of this study is on consonants. Within the consonants the specific area of concentration is fricatives.

The pronunciation of English in Nigeria exhibits provinciality of some sort. It is different from the standard of Received Pronunciation, RP, particularly in the area of typical fricative sounds of English. I don't know for since whether I am right to classify the pronunciation output in English by Nigerian under standard Nigerian English SNE. This is because a great population of Nigerian Speakers of English reduces English sounds to local variants. Adequate productions of English sounds such as fricatives can be observed among educated speakers of the language who are of course few and far between.

There are nine fricative sounds of English: /v, f, ð, Θ, z, s, ʒ, ʃ, h/ which according to

pronunciation.com/introdu, often do not correlate exactly with any particular sound in English as a second Language/English as a foreign Language student's native language. This is exactly the English in the Nigerian situation with respect to speech. The source observes that the difference between sounds of English and those of the native languages of the foreign speakers causes substitutions to occur, and those substitutions often have significant differences from the intended English sound.

The production of fricative sound comes through a narrowing of the articulatory organs and filtering through of the sound resulting in some kind of hissing. Two parameters: place of cortication and manner of articulation, can be used to describe English fricatives thus:

/f/ Voiceless labiodental fricative
/v/ Voiced labiodental fricative
/Θ/ Voiceless interdental fricative
/ ð/ Voiced interdental fricative
/s/ Voiceless alveolar fricative
/z/ Voiced alveolar fricative
/ ʃ / Voiceless palato-alveolar fricative
/ ʒ/ Voiced palato-alveolar fricative
/h/ Voiceless, glottal fricative

More specifically and following cruttenden (2014) English fricatives can be described as follows:

Labio-dental – the lower lip articulates with the upper teeth, eg. /f, v/

Dental – the tongue tip and rims articulate with the upper teeth, e.g. / Θ, ð /;

Alveolar-the blade, or tip and blade of the tongue articulates with the alveolar ridge. e.g. /s, z/;

Palato – alveolar – the blade, or the tip and blade of the tongue articulates with the alveolar ridge and there is at the same time a raising of the front of the tongue toward the hard palate, e.g. / ʃ, ʒ /; and

Glottal – an obstruction, or a narrowing causing friction but not vibration between the vocal folds, e.g. English /h/.

In this research, it is necessary to state that vibration of the vocal lips leads to the production of voiced consonant; absence of vibration of the vocal lips leads to voicelessness. The voiced fricatives are: / v, ð, z, ʒ, /. The voiceless fricatives are: /f, Θ, s, ʃ, h / (Eka 1996, P.10). This differentiation can be represented in the figure below:

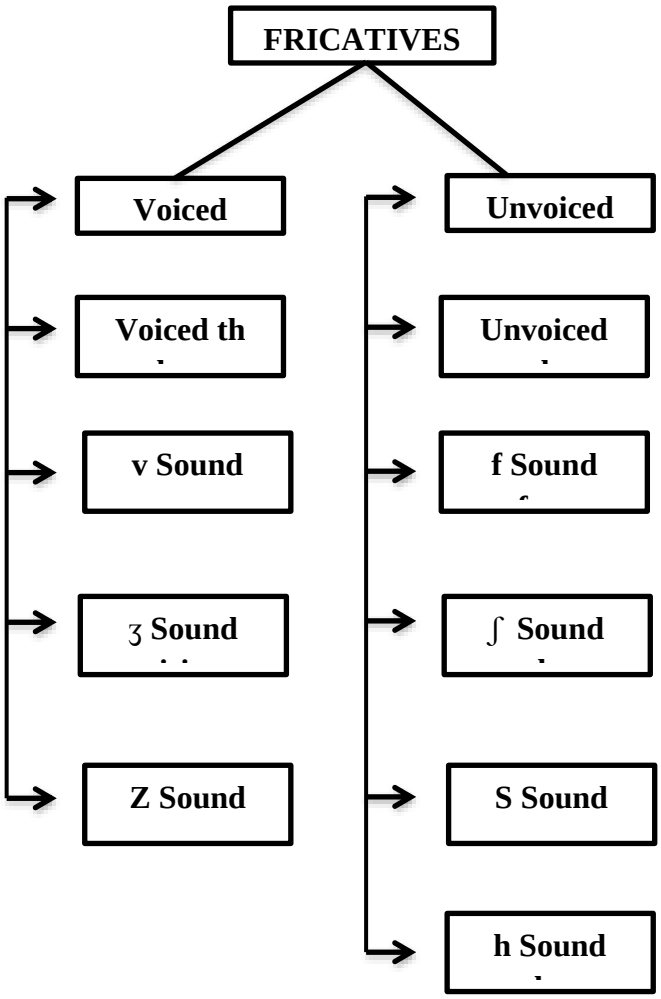

Figure 1: Copied from https://www.pronunciation.com/introdu.

Apart from constricted opening in the vocal tract through which the air forces its way, fricatives are capable of being formed continuously, with no complete blockage of the vocal tract (unlike stops and affricates). Except for /h/ fricatives occur in voiced/unvoiced pairs. The duration of the a vowel sound before a voiced fricative is greater than the duration of a vowel before an unvoiced fricative. Note the following pairs:

face - /feis/ ⟶ phase /fei:z/
bus - /bʌs/ ⟶ buzz /bʌ:z/
safe -/seif/ ⟶ save /sei:v/
leaf - /li:f/ ⟶ leave /ll:v/
(https://www.pronunciation.com/introduce.)

Though every variety of a language and even separate languages fulfill one requirement: communication, mispronunciation by way of substitution of one sound in a language (English) by local variant can impede understanding and by extension, communication. The aim of this research therefore is to examine the production of English consonants (fricatives) and how mispronunciation can affect understanding and communication in the Language.

METHODOLOGY

The method of gathering data for this research was direct method of data elicitation. A passage consisting of seven sentences and occupying ten lines of type written words and titled the principles and practice of politics was read by ten students. The passage contained only two sounds: /v/ and /f/ in word initial word medial and word-final positions. It contained the rest of the seven sounds in only word-initial and word-final positions. A list of eleven separate sentences were constructed to

cater for the positional relevance of the seven sounds e.g. sentences 6 and 7 contained the words "genres" and "rouge" which carry the palato-alveolar fricative /ʒ/ in word initial and word final positions. English word that has the glottal fricative /h/ in word-final position could not be found for the research. It is the only sound that has only two positions: word initial and word final.

The ten informants were given some time to read through the passage and sentences before reading for recording. Their performances were recorded once with android phone (Infinix Hot 10T). The production was played back several times and scored against the actual sounds in the list of sounds and the words tested. For example, the sound /s/ has "she", "position" and "polish" as words in the passage and sentence in which the production of the sound is tested. The local variants or substitutes are noted for analysis. The informants coded A to J are all students randomly selected from the Departments of Business Administration, Economics, English, Crop Science, Sociology, Mass Communication, Philosophy, Performing Arts and Accounting. Departments of English and Business Administration had two informants each, while the other six Departments produced one informant each.

QUANTITATIVE AND QUALITATIVE LIMITATIONS

Out of the 24 recognized consonants of English the performance on only 9 is researched into. It is only the phonemic realization of the fricatives that I am working on. There are other characteristics of the sounds such as acoustic that are not treated.

THEORETICAL FRAMEWORK

The theoretical framework adopted for this research is Systemic Functional Grammar (SFG). The propounder of this theory is M.A.K Halliday. Systemic Functional Grammar is a theory of language in use, creating systematic relations and forms within the less abstract strata of grammar and phonology, on the one hand and more abstract strata such as context of situation and context of culture on the other. (https://en.m.wikipedia.org). According to Eka (2000) the Systemic Functional Approach is an approach to language study that relies on language as it is actually used by its speakers.

Another theory that is relevant to this research is descriptive linguistics. Okono (2019) quotes Dineen (1966) as having stated that a course in descriptive linguistics usually includes training in phonetics as well as in phonological and grammatical analysis. In that case, units, categories, descriptive techniques, their value and justification come from a general theory of language founded on a good deal of experience in scientific description of languages. Dineen sees interdependence between descriptive and general, or theoretical linguistics, whereby each unit must be constantly revised in the light of the other. These two theories are relevant to the research on the pronunciation of English fricatives by Nigerian undergraduates. The selected informants read through the passage and the sentences and were recorded for study and analysis. I believe that the findings of this research will contribute new insights to spoken communication in English by Nigerians.

DATA ANALYSIS

No informant was able to articulate voiced dental fricative, /ð/ the voiceless dental fricative /θ/ and the voiced palato-alveolar fricative /ʒ/ at word initial positions. The voiced dental fricative was replaced in "the" and "this" by the voiced alveolar plosive /d/ in "the" and "this" a contiguous sound available in the L_1 of the informants. The voiceless dental fricative was substituted by the voiceless alveolar plosive /t/ in "third" and "things". Similarly, the voiced palato-alveolar fricative in "genre" was replaced with the digraph: /dʒ/, a neighbouring sound in English. Informant G pronounced the voiced labiodental fricative /v/ in "vie" with a poor sound quality. Informants H, I and J replaced the sound with the voiceless counterpart /f/.

In table 2 all the ten informants accurately rendered the voiced labiodental

fricative /v/ in the two words "over" and "unenviable". The two instances are word medial positions. Similar performances were recorded in the production of voiceless alveolar fricative /s/ in "success", voiceless palato-alveolar fricative /s/ in "position" and voiceless glottal fricative /h/ in "behavoiur". All the three fricative sounds occur in these words in word-medial positions. However, the production of the voiced dental fricative /ð/ in "other", voiceless dental fricative /θ/ in "method", voiced alveolar fricative /z/ in "president" and voiced palato-alveolar fricative /ʒ/ in "measures" proved difficult for all the informants. This is in spite of the sounds occurring in word-medial positions. No informants articulated the four sounds appropriately.

These fricatives /f/ in "leaf", "this", and /s/ in "this" and /ʃ / in "polish" did not pose any difficulty for any of the ten informants. The voiceless dental fricative /θ/ occurring word-finally in "bath" was not well pronounced by subjects B, C, D, F, H, and I as they reduced the fricative to contiguous voiceless alveolar plosive /t/. The voiced labiodental fricative /v/ in "have" was reduced to its voiceless counterpart /f/ by all informants. The voiced dental fricative /ð/ in "breathe" was changed to /t/ by informant A and to its voiceless counterpart /θ/ by informants B to J. The voiced alveolar fricative /z/ in "always" and "raze" was substituted by its voiceless counterpart /s/ by all the ten informants. The voiced palato-alveolar fricative /ʒ/ in "rouge" was increased to the digraph /ʧ/ by all the ten informants. The glottal fricative /h/ in word-final position is not immediately represented by any English word in this research. The data are presented in the tables below:

PASSAGE/SENTENCES

TABLE 1: Showing Informants' Performance in Word-Initial Position

Subject	Sound									Total Score
	/v/	/f/	/ð/	/θ/	/z/	/s/	/ʒ/	/ʃ/	/h/	
A	√	√	o	o	√	√	o	√	√	6
B	√	√	o	o	√	√	o	√	√	6
C	√	√	o	o	√	√	o	√	√	6
D	√	√	o	o	o	√	o	√	√	5
E	√	√	o	o	√	√	o	√	√	6
F	√	√	o	o	√	√	o	√	√	6
G	o	√	o	o	o	√	o	√	√	3
H	o	√	o	o	o	√	o	√	√	4
I	o	√	o	o	√	√	o	√	√	5
J	o	√	o	o	√	√	o	√	√	5

TABLE 2: Showing Informants' Performance in Word-medial Position

Subject	Sound									Total Score
	/v/	/f/	/ð/	/θ/	/z/	/s/	/ʒ/	/ʃ/	/h/	
A	√	√	o	o	o	√	o	√	√	5
B	√	√	o	o	o	√	o	√	√	5
C	√	√	o	o	o	√	o	√	√	5
D	√	√	o	o	o	√	o	√	√	5
E	√	√	o	o	o	√	o	√	√	5
F	√	√	o	o	o	√	o	√	√	5
G	√	√	o	o	o	√	o	√	√	5
H	√	√	o	o	o	√	o	√	√	5
I	√	√	o	o	o	√	o	√	√	5

J	√	√	**o**	**o**	**o**	√	**o**	√	√	**5**

TABLE 3: Showing Informants' Performance in Word-Final Position

Subject	Sound									Total Score
	/v/	/f/	/ð/	/Θ/	/z/	/s/	/ʒ/	/ʃ/	/h/	
A	**o**	√	**o**	√	**o**	√	**o**	√		**4**
B	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
C	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
D	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
E	**o**	√	**o**	√	**o**	√	**o**	√		**4**
F	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
G	**o**	√	**o**	√	**o**	√	**o**	√		**4**
H	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
I	**o**	√	**o**	**o**	**o**	√	**o**	√		**3**
J	**o**	√	**o**	√	**o**	√	**o**	√		**4**

DISCUSSION

The nine consonants known as fricatives occupy slightly more than one third of all the consonants of English. Five fricatives are voiceless while four of them are voiced. Most of these consonants are not generally known to exist in any other language particularly, the languages of speakers of English as L_2. By extension, some consonants (fricatives) do not exist in Ibibio, or Igbo and associated dialects which form the L_1 of the informants in this research. In summary, speakers of English in Nigeria reduce or increase some English fricative consonants to variants in their L_1.

Nevertheless, the production of fricative sounds by Nigerian speakers is variegated by the position of a particular fricative in the word: ability to pronounce the sound depends on whether the sound occurs word-initially, word-medially or word-finally. It is observed and safe to that the voiced fricatives including voiced palato-alveolar fricative /ʒ/ are very difficult to articulate by Nigerians at word-final positions. This observation is aptly portrayed in the result of this research.

It must be stated that where English fricatives have equivalents in the L_1 of second language speakers, the production of English consonants in this regard is reinforced. This is why the fricatives /f/, /s/, /ʃ/ and /h/ were appropriately rendered in any position of occurrence by all the informants in this research. It should also be noted that all the four sounds successfully articulated are voiceless sounds.

VOICED FRICATIVES

The voiced fricatives are more difficult to be realized by foreign speakers of English than their voiceless counterparts. This situation may be partly caused by the explanation of fortis and lenis by Cruttenden (2014). He posits that a voiceless/voiced pair such as English /s,z/ are distinguished not only by the presence or absence of voice but also by the degree of breath and muscular effort involved in their articulation. Continuing, the source explains that those English consonants which are usually voiced tend to be articulated with relatively week energy, whereas those which are always voiceless are relatively strong.

Another factor for the inability of our informants to pronounce voiced fricatives is position of occurrence or environment. The voiced labio-dental fricative /v/, the voiced dental fricative /ð/, the voiced alveolar fricative /z/ and the voiced palato-alveolar fricative /ʒ/ occurring in word-final position were not appropriately pronounced by any informant. The /v/ in "have", the /Θ/ in "breath", the /z/ in "raze" and the /ʒ/ in "rouge" were all substituted by /f,d,s and /ʧ/. Some of these substitute sounds are voiceless, some are

voiced. None of the voiced English fricatives is found in the mother tongue (L_1) of the informants. Consequently, the sounds are strange to the articulatory organs of the L_2 speakers (the informants). Some of the voiced sounds in word-initial and word medial positions were appropriately rendered by the informants.

VOICELESS FRICATIVES

Following my position that similarity of sound between the foreign language and the L_1 of foreign speakers reinforces performance I have observed that the four voiceless English fricatives /f,s,ʃ,h/ did not pose any difficulty of realization by any informant irrespective of environment. The /f/ in "successful", "failures" and "leaf"; the /s/ in "this", "use" and "success"; the /ʃ/ in "she", "position" and "polish"; and the /h/ in "house", and "behavior" in all positions were appropriately realized by all informants.

Apart from voicing and unvoicing, the voiced palato-alveolar fricative is arguably difficult to articulate by foreign speakers of English. No informant articulated this sound in "genres", "measures" and "rouge". The informants reduced the sound to its voiceless counterpart in "visionless" and "measures" to the voiceless /ʃ/ and increased the sound in "rouge" to the digraph: /dʒ/.

CONCLUSION

Sound distortions in pronunciation can impede understanding and by implication communication. Pronunciation of English with substitute sounds or local variants can rob English speech of communication of thought and ideas in the presence of international audience especially if the audience consists of a person who's L_1 is English. The desire of this research is not to get Nigerian undergraduates speak English exactly like the first language speakers but to achieve what Gimson (1984) calls a "careful colloquial style". This will yield for communication a minimum general intelligibility which equates with international acceptability. (Gimson, 1984, P.301). If for instance, a Nigerian says "The president of our country leaves much to be desired with the voiceless alveolar fricative in "president" instead of its voiced counterpart a foreign L_1 listener would think that the Nigerian means precedent.

RECOMMENDATIONS

I suggest that more attention should be paid to the articulation of voiced fricatives in English by Lecturers of English language in Nigeria. Secondly, learners (students) should be encouraged to practice the pronunciation of English fricative consonants both in isolation and in a connected speech. The articulation of the dental fricative and the palato-alveolar fricative should be practiced with effort as they are inherently difficult for foreign language learners. Let's eschew some negative political undertones against appropriate pronunciation of English for what is worth doing is worth doing well. We lose nothing in speaking any language fluently instead we gain more.

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